DRAFT APPROVAL

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Proposed by
USEPA-Region 10

The attached document is a draft copy of USEPA's proposed approval for Chem-Security Systems, Incorporated to conduct the continued landfill disposal of some types of PCB waste within Region 10. The public may review this, and other pertinent reference materials, and comment on the proposal in writing. Direct comments to:

Regional Administrator
U.S. Environmental Protection Agency
Attention: Mr. Roger Fuentes (M/S 533)
1200 Sixth Avenue
Seattle, Washington 98101

U.S. ENVIRONMENTAL PROTECTION AGENCY **DRAFT**

REGION X

1200 SIXTH AVENUE

SEATTLE, WASHINGTON 98101

REPLY TO ATTN OF: Mail Stop 533

Chem-Security Systems, Inc.
Attention: Patrick H. Wicks, President
P.O. Box 1866
Bellevue, Washington 98009

Dear Mr. Wicks:

This is the approval action requested by your firm for the continuation of PCB disposal at Chem-Security's site near Arlington, Oregon.

We are taking this action under the Federal polychlorinated biphenyl regulations published May 31, 1979 in the Federal Register (40 Code of Federal Regulations Part 761.10(e)) promulgated pursuant to the Toxic Substances Control Act of 1976 (Public Law 94-469).

Approval is hereby granted, effective today, subject to the enclosed conditions. It expires January 1, 1984. This approval may be modified, suspended, or revoked if deemed appropriate by the Regional Administrator.

Dated this _____ day of _____, 1981.

_____
John R. Spencer
Regional Administrator

Enclosure

APPROVAL CONDITIONS

Chem-Security Systems, Inc.
PCB Disposal Site
Arlington, Oregon

Administrative Considerations

Pursuant to Section 6(e)(1) of the Toxic Substances Control Act, (Public Law 94-469), regulations were promulgated in Title 40 of the Code of Federal Regulations, Part 761 (44 Federal Register, 31514 et seq.) setting forth the requirements for the formal approval of chemical waste landfills for the disposal of polychlorinated biphenyls (PCBs). By letter dated March 10, 1978, Chem-Nuclear Systems, Inc. made application to Region 10 for approval of a PCB disposal site designated as "Trench 5" at a chemical waste landfill located in Sections 25 and 36 T.2N., R.20E.W.M., Gilliam County, Oregon. The Company submitted a technical report as required by Section 761.41(c)(1) and (2).

Public notice of the application was published on May 1, 1978, in the following newspapers: (a) "The Oregonian" in Portland, (b) "The East Oregonian" in Pendleton, (c) "The Chronicle" in the Dalles. A copy of the notice was also posted in the United States Post Office in Arlington, Oregon. Response to the public notice consisted of one letter stating opposition to the disposal of radioactive materials at the site. No comments were received regarding PCB disposal.

EPA Region 10 has reviewed the technical report and made a comprehensive review of the supplemental document, "Geological and Subsurface Investigations, Arlington Disposal Site, Gilliam County, Oregon" dated January 29, 1971 by Shannon and Wilson, consulting engineers from Portland, Oregon. In addition, a site visit and evaluation was made on April 21, 1978. After appropriate review and evaluation, EPA Region 10 approved the northerly 150 feet of Trench 5 for PCB disposal on June 30, 1978.

By formal application dated September 17, 1979, the Company requested approval of PCB disposal in the southwest corner of Trench 6. Since this portion of Trench 6 (defined and specified in Part C, Special Condition 1, of the November 28, 1979 approval) is located close to the previously approved Trench 5, further public notice was deemed unnecessary. The geological, hydrological and climatological characteristics of the two trenches are nearly identical. EPA Region 10 considered the technical report entitled "Geological and Subsurface Investigations, Arlington Disposal Site, Gilliam County, Oregon" dated January 29, 1971 and the site visit and evaluation made on September 18, 1979 as appropriate to that PCB disposal area in Trench 6.

By formal application dated March 19, 1980, the Company requested deletion of an approved PCB disposal area, the southwest corner of Trench 6. That request was granted in correspondence dated May 14, 1980.

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By formal application dated December 19, 1980, (as amended on January 20, 1981) the Company requested approval of PCB disposal in the southwest corner of Trench 9. The geological, hydrological and climatological characteristics of Trench 9 are nearly identical to those of Trench 5. The technical report of January 29, 1971, and the site visit and evaluation made on September 18, 1979, were considered by EPA Region 10 as appropriate to that PCB disposal area in Trench 9. Approval was granted in correspondence dated February 20, 1981.

By formal application dated September 9, 1981, the Company requested extension of their then currently effective Letter of Approval of November 28, 1979, as amended May 14, 1980 and February 20, 1981.

On the basis of the technical report, supporting materials, and site evaluation, and pursuant to the authority of TSCA §6 (e)(1), 40 CFR 761.41(c)(3)(ii), and Special Condition 2 of Part C of the Chem-Nuclear Letter of Approval signed on November 28, 1979, approval has been granted for PCB waste disposal at the Chem-Security Systems, Inc. disposal site identified as the northerly 150 feet of Trench 5 and the westerly 200 feet of Trench 9. This approval, effective today, supercedes and replaces the November 28, 1979 approval (as amended), and is made subject to the requirements and conditions of Part A and C of the enclosed Technical and Operational Requirements. Please note that violation of the requirements and conditions of this Letter of Approval may subject the Company to substantial penalties under the Toxic Substances Control Act.

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TECHNICAL AND OPERATIONAL REQUIREMENTS

The pre-existing duty of Chem-Security Systems, Inc., to comply with currently effective PCB regulations promulgated pursuant to T.S.C.A. exists independently from, and in addition to, the Company's duties and obligations set forth in this approval letter. Compliance with currently effective PCB regulations alone does not constitute compliance with this approval letter, nor shall compliance with this approval letter alone be construed to constitute compliance with current regulations. Compliance with currently effective PCB regulations shall not constitute a waiver of any obligations or duties set forth in this approval letter, nor shall this approval letter or compliance with this approval letter constitute a waiver of any obligations or duties under any PCB regulation, unless specifically so stated herein. In cases of conflicts, inconsistencies, or ambiquities, the company may apply in writing to the Regional Administrator for a waiver, modification, or amendment of specific parts or provisions of this approval letter, or for a waiver or modification of the applicability of specific parts or provisions of PCB regulations, which waiver, modification, or amendment may be granted upon a showing of good cause.

40 CFR Part 761, dated May 31, 1979, is attached hereto and is by this reference incorporated herein as Appendix I.

This document sets forth the requirements and conditions, in addition to and in concert with those of 40 CFR Part 761, that must be met to be in compliance with the EPA Region 10 approval for PCB waste disposal at the Chem-Security Systems, Inc., disposal site identified as the northerly 150 feet of "Trench 5" and the westerly 200 feet of "Trench 9" located in Sections 25 T.2N., R.20E.W.M., Gilliam County, Oregon. The report is divided into Parts A, B and C. Part A addresses the technical requirements set forth in Section 761.41(b) and includes a determination of whether each specific requirement has been met. Part B addresses waivers granted for specific technical requirements not met in Part A along with rationale for granting the waivers. Part C sets forth Special Conditions that must also be met to remain in compliance with this Letter of Approval.

Part A Technical Requirements

EPA Region 10 has determined that the disposal site has met the technical requirements set forth in Section 761.41(b) of Title 40 unless otherwise indicated. Requirements not met are addressed in the waiver section (Part B).

(1) Soils (Section 761.41(b)(1))

Requirement--Landfill sites are to be located in "thick, relatively impermeable formations." Where this is not possible, the soil at the site shall meet specific parameters as to thickness, permeability, liquid limit, plasticity index, etc.

Determination--This has been met since the site is located in an area underlain by over 200 feet of soil with permeabilities ranging from 4×10^{-4} to 5×10^{-7} cm/sec. Between the soil and the ground water is a layer of impermeable basalt which confines the ground water under pressure.

(2) Synthetic Membrane Liners (Section 761.41(b)(2))

Requirement--Synthetic membrane liners shall be used when the hydrologic or geologic conditions at the landfill require such a liner.

Determination--This requirement has been met since the hydrologic or geologic conditions at the landfill do not require such a liner.

(3) Hydrologic Conditions (Section 761.41(b)(3))

Requirement--The bottom of the landfill must be substantially above the historical high ground water table. Flood plains, shorelands, and ground water recharge areas must be avoided. There can be no hydraulic connection between the site and standing or flowing surface water. The site must have monitoring wells and leachate collection and must be at least 50 feet from the historical high water table.

Determination--This requirement has been partially met. A deep test well at the site has shown that ground water beneath the site occurs under confined conditions at a depth of about 560 feet. The head on this aquifer creates a piezometric surface about 426 feet below the surface. Further, there is insufficient natural recharge to develop a continuous, definable local water table. The bottom of the landfill is substantially above the historical high ground water table and is more than 50 feet above the nearest ground water. The site is not located on a flood plain, shoreland or a ground water recharge area and there is no known hydraulic connection between the site and standing or flowing surface water. One of the required monitoring wells and the leachate collection system are waived in Parts B(1) and B(3)(b).

(4) Flood Protection (Section 761.41(b)(4))

Requirement--If the landfill is located above the 100-year floodwater elevation, the operators shall provide diversion structures capable of diverting all of the surface water runoff from a 24-hour, 25-year storm.

Determination--The disposal site is located above the 100-year flood water elevation; however, a waiver of the requirement will be granted as discussed in Part B(2).

(5) Topography (Section 761.41(b)(5))

Requirement--The landfill site shall be located in an area of low to moderate relief which minimizes erosion and helps prevent landslides or slumping.

Determination--This requirement has been met.

(6) Monitoring System (Section 761.41(b)(6))

(a) Water Sampling

(1) Baseline Data (Section 761.41(b)(6)(i)(A))
Requirement--Ground and surface water from the disposal site shall be sampled for baseline data purposes.

Determination--This requirement has been met since baseline ground water data is available and there is no surface water on site.

(2) Monthly Sampling (Section 761.41(b)(6)(i)(B)
Requirement--Defined water sources shall be sampled at least monthly when the landfill is being used for PCB disposal operations.

Determination--This requirement will be met and is further addressed in Special Condition 25 in Part C.

(3) Sampling After Closure (Section 761.41(b)(6)(i)(C)
Requirement--Defined water sources shall be sampled indefinitely at a frequency of at least every 6 months after closure of the site.

Determination--This requirement has been partially waived to require sampling for a period of 30 years after closure of the site as is discussed in Part B(3)(a).

(b) Groundwater Monitoring Wells

(1) Monitoring Wells (Section 761.41(b)(6)(ii)(A))
Requirement--Three ground water monitoring wells shall be provided in a line through the center of the disposal site from the area of highest water table elevation to the area of lowest water table elevation.

Determination--This requirement will be waived to allow two monitoring wells as is discussed in Part B(3)(b).

(2) Monitor Well Construction (Section 761.41(b)(6)(ii)(B))
Requirement--Monitor wells shall be cased and the annular space cemented with portland cement to prevent percolation of surface water into the well bore.

Determination--This requirement is waived to allow the specifications discussed in Part B(3)(c).

(c) Water Analysis (Section 764.1(b)(6)(iii))
Requirement--Water samples shall be analyzed for PCBs, pH, specific conductance, and total chlorinated organics, and data and records maintained as required in Annex VI of 40 CFR Part 761.

Determination--This requirement will be met as is discussed in Special Conditions 24, 25, and 28 in Part C.

(7) Leachate Collection (Section 761.41(b)(7))

Requirement--A leachate collection and monitoring system shall be installed beneath the landfill and leachate monitored monthly for quantity and quality of leachate produced.

Determination--The leachate collection requirements are waived as is discussed in Part B (1).

(8) Chemical Waste Landfill Operations (Section 761.41(b)(8))

(a) PCB Handling (Section 761.41(b)(8)(i))
Requirement--PCBs shall be handled in a manner to prevent damage to containers and must be segregated from wastes which are not chemically compatible with the PCBs or PCB Items.

Determination--These requirements will be met as described in Special Condition 12, 14, 16, and 31 in Part C.

(b) Operation Plan (Section 761.41(b)(8)(ii))
Requirement--An operation plan shall be submitted to EPA for approval.

Determination--Such a plan has been submitted by the applicant Chem-Security Systems, Inc.. The provisions of the approved operation plan are incorporated herein by reference and the operating plan is attached to this approval as Appendix II.

(c) Operation Plan (Section 761.41(b)(8)(ii))
Requirement--If the facility is to be used to dispose of liquid wastes containing between 50 ppm and 500 ppm PCB, the operations plan must include procedures to determine that liquid PCBs to be disposed at the landfill do not exceed 500 ppm PCB.

Determination--The Operation Plan as well as Special Condition 8 of Part C address this requirement.

(d) Ignitable Wastes (Section 761.41(b)(8)(iii))
Requirement--Ignitable wastes shall not be disposed of in chemical waste landfills.

Determination--This requirement shall be met for trenches which are approved for PCB disposal.

(e) Records Maintenance (Section 761.41(b)(8)(iv))
Requirement--Records shall be maintained for all PCB disposal operations and must include three-dimensional burial coordinates. Additional records must be maintained as required in Annex VI.

Determination--This requirement will be met. In addition, Special Conditions 28 through 35 of Part C address this and other specific requirements for recordkeeping.

(9) Supporting Facilities (Section 761.41(b)(9))

(a) Fencing (Section 761.41(b)(9)(i))
Requirement--A six-foot woven wire fence shall be provided around the perimeter of the site.

Determination--This requirement has been met.

(b) Road Maintenance (Section 761.41(b)(9)(ii))
Requirement--Access and on-site roads shall be maintained in a safe manner.

Determination--This requirement shall be met as described in Special Condition 18 of Part C.

(c) Site Operations (Section 761.41(b)(9)(iii))
Requirement--The site shall be operated and maintained in a safe manner.

Determination--This requirement will be met as described in Special Condition 18 and 19, in Part C and in accordance with the Operation Plan (see Appendix II).

Part B. Waivers of Special Technical Requirements

The following technical requirements under Section 761.41(b) are hereby waived:

(1) Hydrology (leachate collection requirement only) (Section 761.41(b)(3)) and Leachate Collection (Section 761.41(b)(7))

Requirement--A leachate collection and monitoring system shall be installed.

Determination--The disposal site receives about 10 inches of annual rainfall, but has a pan evaporation of about 63 inches per year. In addition, volcanic tuffs beneath the trenches will act as an absorbing soil column some 200 feet thick to trap any fluids that may leak from the trench. The resulting limited downward movement of water from the trenches will produce no degradation of the ground water reservoir, because the reservoir, located at a depth of more than 500 feet, is protected by layers of relatively impermeable basalt. No leachate collection is deemed necessary.

(2) Flood Protection (Section 761.41(b)(4)

Requirement--For sites located above the 100-year floodwater elevation, diversion structures capable of diverting the surface water runoff from a 24-hour, 25-year storm shall be provided.

Determination--The site is located in the Columbia Plateau basaltic province of north central Oregon and is more than 200 feet above the nearest streambed located in adjacent Alkali Canyon. No flood data is available for this area; however, the disposal site is presumed to be above the 100-year floodwater elevation. Since no runoff occurs in the area of the disposal site, the facility will not be required to construct the specified diversion structures. Occasional rain or snow melt that accumulates in wind-blown depressions either sublimates, evaporates or infiltrates into the shallow soil, usually to be evapo-transpired during the dryer months. Special Condition 7 in Part C addresses the requirement for overland flow diversion.

(3) Monitoring Systems (Section 761.41(b)(6)(i)(C), (ii) (A), & (ii) (B))

(a) Sampling after closure (761.41(b)(6)(i)(C))
Requirement--Defined water sources shall be sampled indefinitely every six months after final closure of the disposal site.

Determination--This requirement is partially waived as sampling every six months for a period of 30 years after final closure of the disposal area is deemed adequate. See Special Condition 26 in Part C.

(b) Monitor wells (761.41(b)(6)(ii)(A))
Requirement--Since the underlying earth is impermeable with a uniform slope in one direction, three monitor wells are required that extend from the area of highest water table elevation to the area of lowest water table elevation.

Determination--As indicated in Part A (2), the ground water occurs under confined conditions at a level of 560 feet below the surface. Therefore, two existing wells will provide adequate monitoring (Part C (26)). Dry wells below the disposal site will monitor the unsaturated material.

(c) Monitor wells construction (761.41(b)(6)(ii)(B))
Requirement--Monitor wells shall be cased and the annular space cemented with portland cement to prevent percolation of surface water into the well bore.

Determination--The two existing ground water monitor wells are only partially cased, with portland cement used to cement the bottom of the casing into the underlying basalt. The annular spaces are backfilled with well cuttings from the site. The existing cement and backfill will prevent the movement of surface water down the annular space; therefore, it is not necessary to drill additional wells or to reconstruct the existing wells.

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Part C. Special Conditions

Definitions

(1) "Disposal" is defined in 40 CFR Part 761.2(h) (incorporated herein by reference). For purposes of this approval, actions related to containing, transporting, decontaminating, or confining PCBs and PCB Items at Chem-Security Systems are not considered disposal per se. Disposal will be limited to actual placement in a disposal facility (i.e. trench), and destroying or degrading (including but not limited to incineration and chemical or biological decomposition) of PCBs or PCB Items.

(2)

(3)

(4)

Special Conditions 2, 3, and 4 are reserved for definitions to be added in the future.

Contractors or Consultants

(5) The names of consultant or contractor firms utilized by Chem-Security Systems in meeting the terms of the Letter of Approval and the regulation must be submitted to the Regional Administrator along with a specification of their authority to act as representatives for Chem-Security Systems. This shall include the names of individuals within the consultant or contractor firm who are authorized to act for Chem-Security Systems in matters delegated to the consultant or contractor firm and the extent of individual responsibility delegated to them by Chem-Security Systems. The document submitted shall be signed by an authorized representative for both Chem-Security Systems and the contracting or consulting firm.

Trench Preparation

(6) The floor of the northerly 150 feet of Trench 5 and the westerly 200 feet of Trench 9 shall be covered with a 1-foot thick layer of charcoal and the charcoal covered with a 1-foot layer of earth prior to placement of PCB wastes.

(7) The land surface around the northerly 150 feet of Trench 5 and the westerly 200 feet of Trench 9 shall be graded, diked, or trenched to prevent any overland surface runoff from flowing into the PCB landfill.

Identification of Waste

(8) Prior to disposal of liquid contaminated by PCBs, the PCB concentration shall be determined. The basis for this determination must be: i) laboratory analysis by an analytical laboratory participating in EPA's Performance Evaluation Sample Program to determine that the liquid contains less than 500 ppm (0.05%) PCB; or ii) a written statement by the generator, signed by a responsible individual (i.e., plant manager, owner), that the liquid contains less than 500 ppm (0.05%) PCB along with the technical justification for this determination. The disposal of liquids at or above a concentration of 500 ppm (0.05%) PCB at Chem-Security Systems, Inc., is prohibited. Written records of the PCB concentration determination shall be maintained.

(9) Shipments received by Chem-Security Systems, Inc. whose descriptions are not consistent (by their appearance or characteristics) with descriptions furnished by the generator or contracting firm must not be disposed until clarification or verification of shipment contents and Chem-Security Systems' authority to dispose are determined. For example, bung top barrels must be assumed to contain liquids, transformers must be assumed to contain PCB liquid, and ring top barrels must be assumed to contain PCB Capacitors unless documentation is furnished which otherwise itemizes the contents of containers and transformers. This documentation must be signed by a responsible individual from the generator firm (i.e., plant manager, owner) and must be maintained by Chem-Security Systems, Inc..

Disposal Authority

(10) Chem-Security Systems, Inc., has no duty or obligation under the law or regulations to accept any shipment of PCB waste sent to it for disposal, and is solely responsible for determining whether or not to accept a shipment, as well as whether or not it may lawfully dispose of a shipment at its approved site.

(11) PCBs, as defined by 40 CFR §761.2 (incorporated herein by reference), shall be disposed of as provided by 40 CFR §761.10 and conditions of this approval letter. PCBs shall be disposed of only in the northerly 150 feet of Trench 5 located in SW 1/4, SE 1/4, Section 25, T.2.N., R.20E.W.M. and in the westerly 200 feet of Trench 9 located in SE 1/4, SE 1/4 of same Section 25, Gilliam County, Oregon. PCBs received at the Chem-Security Arlington facility shall be stored in compliance with 40 CFR §761.42 until disposed of.

(12) Except as provided in Special Condition 6 and 22, no materials other than decontaminated transformers, nonliquid PCB mixtures, and PCB articles (excluding large PCB capacitors), equipment and containers may be placed in the northerly 150 feet of Trench 5 and the westerly 200 feet of Trench 9.

PCB contaminated liquids and mineral oil dielectric fluids which contain a concentration of PCBs less than 500 ppm which have been pretreated and/or stabilized (e.g. chemically fixed, mixed with dry inert absorbant, etc.) such that a non-flowing consistency is achieved shall be considered as nonliquid PCB mixtures for purposes of this Special Condition, and may be disposed in the northerly 150 feet of Trench 5 and the westerly 200 feet of Trench 9. (See Special Condition 8 for verification of concentration.) No other liquids shall be disposed of in the remainder of Trench 5 or Trench 9 unless a substantially impermeable dike, having a width of at least 10 feet, is placed between the PCB disposal area and the remainder of Trench 5 or Trench 9.

(13) PCB Transformers must be drained and rinsed in accordance with 40 CFR Part 761.10(b)(1)(i)(B) prior to disposal. This must be determined and documented by the generator or by Chem-Security Systems, Inc. prior to disposal at Chem-Security Systems. Written records must be maintained by Chem-Security Systems and must be available for inspection. The written records must be signed and dated by the individual responsible for the determination (i.e., generator plant manager, owner, or Chem-Security Systems employee) that the transformers have been drained and rinsed.

(14) PCB shipping containers permanently dedicated and labelled for use solely for shipping PCB articles may be returned for re-use provided that all free flowing liquid is removed and placed in storage and any remaining liquid is removed by absorption onto charcoal or other sorbent, with subsequent disposal of such charcoal or sorbent into the northerly 150 feet of Trench 5 or the westerly 200 feet of Trench 9.

(15) PCB nonliquid materials shall be buried in the containers in which they are received or stored.

(16) In no event shall PCB containers be dumped or pushed into Trench 5 or Trench 9 from the lip of the trench.

Storage

(17) On occasion, shipments of PCBs for disposal may be received at Chem-Security Systems which cannot be disposed immediately due to lack of documentation, uncertainty of shipment contents, leaking containers, backups at the disposal facility, etc. Therefore, a PCB storage facility complying with 40 CFR Part 761.42(b) shall be maintained at Chem-Security Systems. This facility must be marked in accordance with 40 CFR Part 761.42(c)(3). All PCBs placed in storage, either in the facility or in temporary storage, shall be recorded and dated in accordance with 40 CFR 761.42(c)(8) and 40 CFR 761.45(b) (see Appendix I).

Safety

(18) Roads shall be maintained to and within the site which are adequate to operate and maintain the site without causing safety or nuisance problems or hazardous conditions.

(19) The disposal site shall be operated and maintained in a manner to prevent safety problems or hazardous conditions resulting from spilled liquids or windblown materials.

Training

(20) Chem-Security Systems personnel directly involved with handling, storage, transport or disposal of PCBs (or the contracting of such activities) must be demonstrably familiar with general requirements of this approval. At a minimum this must include: i) disposal requirements for liquids and capacitors; ii) categories of PCB transformers; iii) requirements for identification of PCB waste (i.e. written specific descriptions); and iv) basic recordkeeping (i.e. shipment documentation). Chem-Security Systems, Inc., shall be solely responsible for insuring personnel familiarity with the requirements of this approval and the regulation.

(21) A written record of personnel PCB training shall be maintained. This record shall include: 1) topics covered; 2) individuals conducting the training; 3) time spent in training; 4) participants names and; 5) signature of participants.

Closure

(22) Upon final closure of the northerly 150 feet of Trench 5 and the westerly 200 feet of Trench 9 the trench shall be covered with a layer of compacted earth which extends a minimum of 3 feet below the natural land surface. This cover layer shall be shaped or crowned to divert any water away from the trench. In addition, the earth cover shall be further covered with 6 inches of coarse gravel to prevent wind erosion.

(23) The trench used for disposal of PCB wastes shall not be reopened after final closure unless written notice is furnished to the Regional Administrator and approval granted prior to the commencement of such activity.

Monitoring

(24) Test wells B_3, and B_4, shown on Attachment B to the technical report submitted by Chem-Nuclear Systems, Inc., on March 10, 1978, and the observation wells in Trench 5 and Trench 9 shall be checked monthly for the presence of liquid in the well bore. These observation wells shall extend to the bottom of the trench and shall be at least 6 inches in diameter (except Trench 5 observation wells which shall be at least 4 inches in diameter) and adequately perforated to collect fluids. If greater than 50cc of liquid is detected, a sample shall be taken and analyzed for the following parameters.

a. PCBs (detectability to 1.0 ppb)
b. pH
c. Specific Conductance
d. Total Chlorinated Organics (detectability to 1.0 ppm)
e. Chlorides (detectability to 1.0 ppm)

When monitoring shows that some liquid has accumulated in the bottom of a trench, it shall be removed immediately by pumping or bailing the well. A contemporaneous written record shall be kept of the liquid level and date of pumping. Any liquid removed from the well shall be stored pursuant to this approval for subsequent incineration unless tested and found to be less than 500 ppm PCB.

(25) The two ground water monitor wells (site water well and the office water well) shall be sampled monthly and analyzed for the following parameters:

a. PCBs (detectability to 10 to 30 ppt)
b. pH
c. Specific Conductance
d. Total Chlorinated Organics (detectability to 1.0 ppm)

Samples from each well shall be taken from a point located between the well pump and the pressure tank.

A written record of sampling and laboratory analysis results shall be maintained.

(26) The two ground water wells (the site water well and the office water well) shall be sampled on a frequency of no less than once every six months for a period of 30 years after final closure of the disposal site and the samples analyzed as required in Special Condition 25. A written record of sampling and laboratory analysis results shall be maintained.

(27) Sampling methods and analytical procedures for the parameters required in Special Condition 25 shall be as specified in 40 CFR Part 136 as amended in 41 FR 52779 on December 1, 1976. In addition, any laboratory performing chemical (PCBs and total chlorinated organics) tests for the operation of the disposal site shall be a participant in EPA's Performance Evaluation Sample Program for analytical quality control.

Records

(28) Records are an integral part of the approval requirements. The recordkeeping requirements of 40 CFR Part 761 are by this reference incorporated fully herein as part of this approval. Special Conditions 8, 9, 21, 24, 25, and 26, above, contain additional recordkeeping requirements. Further requirements, beyond those of Part 761, are listed below under this "Records" section.

(29) The annual document (described in 40 CFR Part 761.45(b)) to be prepared by Chem-Security Systems by July 1 of each year, covering the previous calendar year, shall be submitted to: Hazardous Waste Branch, Region 10 EPA, M/S 533, 1200 Sixth Avenue, Seattle, Washington 98101 by August 1 of each year. This document is a single document and must stand on its own for compliance with the annual document requirement. The submitted annual document must be signed by a responsible individual designated by Chem-Security Systems, dated and labeled as the annual document.

(30) All records shall be maintained in accordance with 40 CFR §761.45(b), (d) and (f), 761.41(b)(8), 761.42(c)(8) and the additional requirements of this approval.

(31) No PCB wastes, nor wastes or materials of any kind, shall be placed or disposed of in the northerly 150 feet of Trench 5 or the westerly 200 feet of Trench 9 unless a written record of the placing or disposal of such waste or material is made contemporaneously. The exact location of each waste shall be included in the record with respect to a permanent, surveyed referenced monument. The nature of each waste or material, including whether such waste is a PCB mixture, PCB article, PCB container, or PCB equipment, shall also be included in the record. Such records shall also include three-dimensional burial coordinates.

(32) In addition to the requirements of Part 761 (Appendix I), descriptions of container and transformer contents in Chem-Security Systems records must specifically identify the type of PCB waste. If more than one type of waste is contained therein, the descriptions must reflect that fact. For example, 'PCB Waste' is not an adequate description. At a minimum the waste must be described in terms of the 1) quantity (units and weight); 2) physical state (i.e. liquid, solid); 3) commercial end-use or source and; 4) PCB content in ppm, percent or kilograms, prior to disposal. Source documents shall supply the above information and must be retained by Chem-Security Systems. Where those source documents are not adequate, the waste must not be disposed until such documents with adequate descriptions are received or until Chem-Security Systems, Inc. determines container and/or transformer contents and develops a written record which is signed and dated by the individual responsible for making the determination.

For example: 1) 20-55 gallon drums (3500 kg) liquid waste transformer mineral oil dielectric, 125 ppm PCB,

2) 5 yd^3 (24,000 lbs) solid-waste bulk soil clean-up material approximately 5% PCB from capacitor spill

3) One 55-gallon drum (50 lbs) solid-waste PCB, drum empty, triple rinsed, estimated greater than 500 ppm PCB.

(33) All data and the results of sampling and analysis shall be recorded in writing contemporaneously, and such written records shall be maintained as specified in 40 CFR 761.45(b).

(34) PCB Transformers must be drained and rinsed in accordance with 40 CFR Part 761.10(b)(1)(i)(B) prior to disposal. This must be determined and documented by the generator or Chem-Security Systems prior to disposal at Chem-Security Systems. Written documentation must be maintained by Chem-Security Systems and be available for inspection. Such documentation shall include the generator's name, transformer manufacturer and serial number (if available), transformer fluid capacity (if available) and the dated signature of the individual responsible for the determination that the transformer was drained and rinsed (i.e., plant manager, owner, Chem-Security Systems employee).

(35) Occasionally Chem-Security Systems may refuse to accept shipments arriving at Chem-Security Systems for disposal due to the requirements of the regulation or of this approval. Those shipments shall be recorded with the reason for refusal. Those written records shall be maintained by Chem-Security Systems and copies forwarded to EPA Region 10 within ten (10) calendar days of shipment refusal. Information recorded shall be similar to that required in Special Condition 32.

Reporting

(36) All monitoring results obtained pursuant to Special Conditions 24, 25 and 26 shall be recorded in writing contemporaneously, and such written records shall be submitted monthly to the Hazardous Waste Branch, EPA Region 10, M/S 533, 1200 Sixth Avenue, Seattle, Washington 98101. Additionally, the annual document required by Special Condition 29 and such records as are generated pursuant to Special Condition 35, shall be submitted to the same address.

(37) The operator of the disposal site shall immediately report to the Regional Administrator any detection of PCBs in the samples obtained in compliance with the monitoring requirements of Special Conditions 25 and 26 within 48 hours of receiving such information.

(38) Any spilled PCB material received at the site shall be reported on a monthly basis to the Hazardous Waste Branch, EPA Region 10, M/S 533, 1200 Sixth Avenue, Seattle, Washington 98101. The report shall include the spilled material source, specific description of the material, the transporter and the quantity delivered. Such description shall conform to the requirements of Special Conditions 32 and 33.

Access

(39) Access to the disposal site during normal working hours for the purpose of EPA inspections and sampling conducted pursuant to Section 11 of the Toxic Substances Control Act shall not be denied.

Duration of Approval

(40) Approval of the above described site shall continue until January 1, 1984, and shall expire on that date unless otherwise extended. The Regional Administrator may act at any time to extend, alter, amend, modify, suspend, or revoke this approval as he deems necessary or appropriate.

DRAFT

NOTICE

Pursuant to Section 15(1) and 16(a) of TSCA, (15 USCA §§2614 and 2615(a)) the recipient hereof is advised that penalties not to exceed $25,000 per day may be administratively assessed for any failure to comply with requirements of this document imposed by the authority of, or the regulations prescribed pursuant to, Section 6(e) of the Toxic Substances Control Act (15 USC §2605(e)).

APPENDIX I

APPENDIX II

CHEM-SECURITY SYSTEMS, INC.

P.O. Box 1866 • Bellevue, Washington 98009 • (206) 827-0711

December 1, 1981

Mr. John R. Spencer
Regional Administrator
U.S. Environmental Protection Agency
Region X
1200 Sixth Avenue
Seattle, Washington 98101

Re: Submission of Operation Plan for Arlington Site

Dear Mr. Spencer:

On June 30, 1978, EPA granted approval to Chem-Nuclear Systems, Inc. (now Chem-Security Systems, Inc.) for disposal of polychlorinated biphenyls (PCBs) at the Arlington site in Gilliam County, Oregon. That Letter of Approval has subsequently been amended on numerous occasions (see Enclosure 1) and is scheduled to be continued until January 1, 1982. On September 9, 1981, we formally requested that the Letter of Approval be extended to January 1, 1985.

In order to aid you in your consideration of our extension request, please find enclosed (Enclosure 2) a newly revised and updated operation plan for the Arlington site. We have strived to develop this plan in such a format that it is complete while still at a level that the general public can better understand the operations at Arlington.

If you or your staff find any area where the plan could be upgraded, please do not hesitate to contact me at 827-0711. Thank you.

Sincerely,

CHEM-SECURITY SYSTEMS, INC.

Kenneth A. Lepic
Manager, Regulatory Affairs

KAL/js
Enc.
cc: Mr. Rich Reiter, Oregon Department of Environmental Quality
Mr. John Vlastelicia, Oregon Operations Office

ENCLOSURE 1

REVISIONS TO LETTER OF APPROVAL
TO DISPOSE OF PCBs AT ARLINGTON, OREGON

Date	Action
November 28, 1979	. Extended site approval until January 1, 1982
	. Approved portions of Trench 6 as a PCB disposal site
May 14, 1980	. Agreed with CSSI request to delete Trench 6 as an approved disposal area
	. Allowed disposal of PCB capacitors
May 16, 1980	. Authorized relief from 40 CFR 761 to dispose of 530 PCB capacitors without the necessity for placing them in barrels with absorbents.
February 20, 1981	. Approved portions of Trench 9 as a PCB disposal area.
March 2, 1981	. Provided notification that "grandfather" approval to landfill PCB capacitors expired on March 1, 1981
April 6, 1981	. Advisory determination--the 30-day temporary storage time limit commences when the PCB container is received at the site.
	. Approved landfilling of PCB contaminated transformers provided that PCB contents are gelled or solidified prior to burial